

COS 202: CHEMICALS

Citrus College Course Outline of Record

Heading	Value
Effective Term:	Fall 2023
Credits:	8.5
Total Contact Hours:	240
Lecture Hours :	120
Lab Hours:	120
Hours Arranged:	0
Outside of Class Hours:	240
Total Student Learning Hours:	480
Prerequisite:	COS 141.
Strongly Recommended:	ENGL 101.
Transferable to CSU:	No
Transferable to UC:	No
Grading Method:	Standard Letter

Catalog Course Description

An introduction to the science and theories of hair color, bleach, chemical straighteners, and chemical waves. Lectures, demonstrations and practical experience in the following areas: hair color, bleach, predisposition and strand tests, formulation, color removal, chemical waving, and chemical straightening. 120 lecture hours, 120 lab hours.

Course Objectives

- Practice safety, sanitation, and disinfection procedures for chemical services, tools, implements, and equipment.
- Comprehend the role of density, porosity, hair texture, and wave pattern of the hair in the proper analysis and choice of chemicals.
- Differentiate and comprehend the various chemicals used for a chemical wave.
- Differentiate and comprehend the various chemicals used for a chemical relaxer/straightener.
- Differentiate and comprehend the various chemicals used for a chemical curl reformation.
- Comprehend the various base sizes, base placements, and sectioning patterns used to position tools and the outcome.
- Demonstrate the knowledge and ability to perform the most widely used perm patterns using advanced techniques: rectangle, contour, bricklay, spiral, and "beach waves."
- Demonstrate and perform virgin and retouch applications for a chemical relaxer/straightener.
- Demonstrate and perform virgin and retouch applications for curl reformation.
- Develop strong communication skills regarding chemical texture services.
- Comprehend the various chemicals used to perform color applications: temporary, semi-permanent, demi-permanent, permanent, developers, decolorizers, color remover.
- Differentiate between the following: levels of color, stages of decolorization, tone, intensity, complimentary colors.

- Demonstrate advanced techniques: weaving, slicing, block patterns, zones, balayage, ombre, corrective color.
- Develop strong communication skills regarding hair color services.

Major Course Content

Health and Safety

1. Infection control
2. Draping
3. Tools
4. Predisposition test
5. Disinfecting procedures

Hair Analysis

1. Wave pattern
2. Texture
3. Porosity
4. Elasticity
5. Density

Product Knowledge and Chemistry (relaxers and perms)

1. Sodium hydroxide relaxers
2. Thioglycolic relaxers
3. Ammonium thioglycolate
4. Acid waves
5. Alkaline waves
6. Exothermic waves
7. Endothermic waves
8. "American" waves

Product Knowledge and Chemistry (hair color)

1. Categories of color (temporary, semi-permanent, demi-permanent, permanent)
2. Aniline derivatives
3. Developers
4. Bleach (on and off the scalp, powder, oil, or cream)
5. Levels of color
6. Stages of decolorizing
7. Color wheel
8. Underlying/contributing pigment

Chemical Texturizing Tools/Equipment

1. Rods (straight/concave)
2. Spiral rods
3. Soft bender rods, loops
4. Combs
5. Picks
6. Heated dryer/open air machine

Hair Color Tools and Equipment

1. Brushes
2. Bowls, bottles

3. Combs
4. Open air machine

Communication

1. Record keeping
2. Consultation

Lab Content

Chemical Texturizing Techniques

1. Virgin/retouch chemical relaxer/straightener
2. Virgin/retouch curl reformation
3. Virgin/retouch soft curl relaxer
4. 8-9 Block basic perm application
5. Advanced spiral application
6. Advanced bricklay pattern
7. Advanced loop pattern
8. Advanced contour/block pattern
9. Advanced relaxer application
10. American wave application

Hair Color and Bleaching Techniques

1. Color retouch application
2. Bleach retouch application
3. Virgin color application
4. Virgin bleach application
5. Toner application
6. Highlighting and slicing applications
7. Lowlight application
8. Balayage application
9. Ombre application
10. Shadow root application
11. Zonal/block color applications
12. Color melting
13. Removal of artificial color
14. Tint back to natural applications

Suggested Reading Other Than Required Textbook

Modern Salon Magazine
American Salon Magazine
Behind the Chair Magazine

Examples of Required Writing Assignments

Compare and contrast a permanent wave acid solution vs. permanent wave alkaline solution.

Examples of Outside Assignments

Demonstrate a bricklay pattern application using a non-metal permanent wave tool on a mannequin.

Instruction Type(s)

Lab, Lecture, Online Education Lab, Online Education Lecture